UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,583	12/05/2001	Ralf Bertram	DE920010035US1	3541

7590 08/29/2005	EXAMINER
David R. Irvin	SHERR, CRISTINA O
IBM Corporation	

T81/503	ART UNIT · PAPER NUMBER
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Research Triangle Park, NC 27709	

DATE MAILED: 08/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 April 2005*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This communication is in response to the Applicant's amendment filed April 14,

2005 2004. Claims 1 and 8 have been amended. Claims 1-14 are pending in this case.

Response to Arguments

2.   Applicant's arguments with respect to claims 1-14 have been considered but are

moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

4.   A person shall be entitled to a patent unless –

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Jacobi

et al (US 6,317,722).

6.   Regarding claim 1 –

Jacobi discloses a computerized method for generating a recommendation of an item to

an advisee, comprising the steps of: receiving a recommendation request comprising a

selected item list from an advisee for a recommendation by a recommendation system;

in response to the recommendation request, computing a plurality of similarity factors

based on at least one advisee profile from at least one newly rated item and

determining which at least one user has already rated the item, wherein the advisee

profile comprising a plurality of records, each record including a user identifier, an item

identifier, and a rating value, such that each record is linked in a first and a second

dimension, and items from the selected item list that indicate similarity between the

advisee and a plurality of users of the recommendation system who have previously

provided ratings of items from the selected item list selecting, from the plurality of users

of the recommendation system, neighboring users to the advisee, according to the

similarity factors; generating a recommendation of at least one item of the selected item

list items, according to the previously provided ratings of the at least one item plurality of

items by the neighboring users (e.g. col 2 ln 32 – col 4 ln 35).

7.   Jacobi does not utilize identical terminology with respect to the instant case,

referring to shopping cart, for example and maps of similar items, and only one aspect

or embodiment of Jacobi is thus a computer-implemented method of recommending

items to a user. However, it would be obvious to one of ordinary skill in the art to adapt

the invention in Jacobi for the uses in the instant invention in order to facilitate sales.

*.   Regarding claim 2 –

Jacobi discloses the method of claim 1, wherein all items upon which the step of

computing depends are included in the selected item list (e.g. col 3 ln 38-56).

8.   Regarding claim 3 –

Jacobi discloses the method of claim 2, wherein the recommendation of at least one

item includes only items that are included in the selected item list (e.g. col 3 ln 38-56).

9.   Regarding claim 4 –

Jacobi discloses the method of claim 1, wherein the step of selecting neighboring users

excludes, any user whose similarity with the advisee is below a predetermined threshold

(e.g. col 6 ln 15-30).

10.   Regarding claim 5 –

Jacobi discloses the method of claim 1, wherein the step of computing and the step of

selecting are executed substantially in parallel by inserting each newly computed

similarity factor into a neighbor list in decreasing order of similarity and by limiting length

of the neighbor list by excluding a user with lowest similarity if otherwise the neighbor

list would exceed a predetermined length (e.g. col 9 ln 58 – col 10 ln 10).

11.   Regarding claim 6 –

Jacobi discloses the method of claim 1, further including the step of caching identifiers

of the neighboring users, associated similarity factors, and time stamps (e.g. col 9 ln 58

– col 10 ln 10).

12.   Although Jacobi does not utilize exactly the same criteria for filtering out users as

in the instant case, it would be obvious to one of ordinary skill in the art to adapt Jacobi

by merely choosing different criteria or characteristics.

13.   Regarding claim 7 –

Jacobi discloses a user profile for a recommendation system, comprising a plurality of

records, each record including a user identifier, an item identifier, and a rating value,

wherein each record is linked in a first and a second dimension, the first dimension

linking records with a same user identifier in a sequence according to the item identifier,

and the second dimension linking records with a same item identifier in a sequence

according to the user identifier (e.g. col 9 ln 58 – col 10 ln 10).

14.   Regarding claim 8 –

Jacobia discloses a computerized method for generating a recommendation of an item

to an advisee, comprising the steps of receiving recommendation request comprising a

selected item list from an advisee for the recommendation by a recommendation

system; in response to the recommendation request, comp0uting a plurality of similarity

factors based on at least one advisee profile from at least on newly rated item and

determining which at least one user has already rated the item; selecting a first set of

users from a group of users of the recommendation system based on the selected item

list; selecting neighboring users from the first set of users based on similarities between

the advisee and each member of the first set of users; and generating a

recommendation of at least one item from the selected item list based on ratings

provided by each neighboring user (e.g. col 2 ln 32 – col 4 ln 35).

15.   Jacobi does not utilize identical terminology with respect to the instant case,

referring to shopping cart, for example and maps of similar items, and only one aspect

or embodiment of Jacobi is thus a computer-implemented method of recommending

items to a user. However, it would be obvious to one of ordinary skill in the art to adapt

the invention in Jacobi for the uses in the instant invention in order to facilitate sales.

16.   Regarding claim 9 –

Jacobi discloses the computerized method of claim 8, wherein the similarities are

determined from an advisee profile and user profiles, and the advisee and user profiles

are based on advise and user behavior including at least one of buying pattern, item

ratings, bookmarked websites, website usage pattern, and user action relative to a

particular item (e.g. col 9 ln 58 – col 10 ln 10). Although Jacobi does not utilize exactly

the same criteria for filtering out users as in the instant case, it would be obvious to one

of ordinary skill in the art to adapt Jacobi by merely choosing different criteria or

characteristics. (e.g. col 4 ln 20-35).

17.   Regarding claim 10 –

Jacobi discloses the computerized method of claim 9, wherein an advisee profile or a

user profile is updated when a new piece of information is added thereto (e.g. col 4 ln

30-35).

18.   Regarding claim 11 –

Jacobi discloses the computerized method of claim 8, further comprising assigning a

confidence factor to each advisee profile and each user profile, wherein the confidence

factor is based on the combined effect of selected pieces of information recorded in a

user or advisee profile (e.g. col 3 ln 35-50).

19.   Regarding claim 12 –

Jacobi discloses the computerized method of claim 8, further including determining

similarities between the advisee and each member of the first set of users after

receiving a selected item list from the advisee (e.g. col 4 ln 45-60).

20.   Regarding claim 13 –

Jacobi discloses the computerized method of claim 8, wherein a member of the first set

of users is selected as a neighboring user if the similarity between the advisee and the

member of the first set of users is better than a predetermined threshold (e.g. col 3 ln

55-60).

21.   Regarding claim 14 –

Jacobi discloses the computerized method of claim 8, further comprising assigning a

weight to each neighboring user where the weight is greater for a neighboring user have

greater similarity to the advisee and the weight is lower for a neighboring user having a

lower similarity to the advisee (e.g. col 3 ln 55-60).

22.   Examiner's note: Examiner has cited particular columns and line numbers in

the references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings in the art and are

applied to the specific limitations within the individual claim, other passages and figures

may be applied as well. It is respectfully requested from the applicant, in preparing the

responses, to fully consider the references in entirety as potentially teaching all or part

of the claimed invention as well as the context of the passage as taught by the prior art

or disclosed by the examiner.

Conclusion

23.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

24.   Linden et al (US 6,266,649) discloses collaborative recommendations using item-

to-item similarity mappings.

25.   Smith et al (US 6,853,982) discloses content personalization based on actions

performed during a current browsing session.

26.   Petra et al (US 2004/0205065) discloses a system for creating and maintaining a database of information utilizing user opinions.

27.   Linden et al (US 6,912,505) discloses use of product viewing histories of users to identify related products.

28.   Petras et al (US 2001/0047290) discloses a system for creating and maintaining a database of information utilizing user opinions.

29.   Linden et al (US 2005/0071251) discloses data mining of user activity data to identify related items in an electronic catalog.

30.   Amazon.com catapults electronic commerce to next level with powerful new features (Amazon News release, Sept. 23, 1997).

31.   Epinions.com buying guide.

32.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cristina Owen Sherr whose telephone number is 571-272-6711. The examiner can normally be reached on 8:30-5:00 Monday through Friday.

33.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 571-272-6712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

34.   Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

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PRIMARY PATENT